ABSTRACT OF THE DISCLOSURE

An apparatus for transmission of free space optical communication system signals employing a spatially-extended light source and method of using the same. A laser beam source directs an optical signal into a free end of a segment of multimode fiber. As the optical signal passes through the segment of multimode fiber, the optical signal is converted into a mode-scrambled optical signal. This mode-scrambled signal may then be used as a spatially-extended light source that is directed outward as an optical beam through the use of a collimating lens.